IN THE CLAIMS

1. (original): A method of forming microparticles with a ferromagnetic core encapsulated in a graphitic shell containing hetero atoms, which includes the steps of providing a solution containing source material of a ferromagnetic metal, carbon and the hetero atoms, forming solidified particles containing source material of the ferromagnetic metal, carbon and the hetero atoms from said solution, and pyrolysing said solidified particles in inert gas so as to form said ferromagnetic core and said encapsulating graphitic coating containing hetero atoms.

2. (original): A method according to claim 1, wherein the solution is divided into droplets prior to forming of the solidified particles.

3. (original): A method according to claim 2, wherein the solidification is carried out by precipitation of the droplets.

4. (original): A method according to claim 2, wherein the solidification is carried out by injection of the droplets into the pyrolysis zone.

5. (original): A method according to claim 1, wherein the solidified particles are formed by chemical precipitation in bulk in said solution.

6. (previously presented): A method according to claim 1, wherein the hetero atoms are at least one of N, B, P or O.

7. (previously presented): A method according to claim 1 wherein the solution contains at least one of a metal cyanide compound, a metal isocyanide compound, a metal cyanate compound and a metal isocyanate.

8. (original): A method according to claim 7 wherein said compound contains a complex anion selected from metal cyanide, metal isocyanide, metal cyanate and metal isocyanate complex anions.

9. (previously presented): A method according to claim 1 wherein the solution contains a cationic species containing or consisting of a first metal and an anionic species containing a second metal, the first and second metal being the same or different and at least one of the first and second metals being ferromagnetic.

10. (original): A method according to claim 9 wherein each of the first and second metal are selected from Fe, Ni, Ca, Zn, Cu, Mn, Co, Mg, Pd, Pt, Ti, Mo and V.

11. (previously presented): A method according to claim 1 wherein the ferromagnetic core contains at least one metal in elemental or alloy form.

12. (previously presented): A method according to claim 1 wherein the ferromagnetic core contains at least one metal carbide.

13. (previously presented): A method according to claim 1, wherein the solution additionally contains a diluent precursor which form a diluent for the pyrolysed particles.

14. (original): A method according to claim 13, wherein the diluent precursor is a decomposable carbon-containing compound which forms an amorphous matrix upon pyrolysis.

15. (previously presented): A method according to claim 1 including the step of treating the surface of the particles and/or the matrix to produce catalytic activity.

16. (original): A method according to claim 15, wherein the treatment includes deposition of a catalytically active metal.

17. (currently amended): Microparticles having a ferromagnetic core encapsulated by a graphitic curved shell containing hetero atoms, said microparticles being embedded in an amorphous matrix.

18. (original); Microparticles according to claim 17, wherein the curved shell is of a plurality of layers of graphite sheets.

19. (original): Microparticles according to claim 17 or claim 18 wherein the core has a diameter in the range 5 to 500 nm, preferably 10 to 150 nm.

20. (canceled)

21. (previously amended): Microparticles according to claim 17 which have a catalytically-active surface.

22. (currently amended): Microparticles according to claim ~~20~~ 17, wherein the matrix has a catalytically-active surface.

23. (original): Microparticles according to claim 21 or 22, wherein the catalytic activity is due to a metal deposited on the surface.

24. (previously presented): Microparticles according to claim 17 wherein the ferromagnetic core consists of at least one phase selected from metal, alloy, carbide and oxide.

25. (canceled)

26. (canceled)